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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,635	03/29/2004	Jang Hui Cho	46500-000615/US/COA	9587
30/593 7590 05/26/2009 HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 8910 RESTON, VA 20195				
EXAMINER				
SHIBRU, HELEN				
ART UNIT		PAPER NUMBER		
2621				
MAIL DATE		DELIVERY MODE		
05/26/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/810,635

**Applicant(s)**

CHO ET AL.

**Examiner**

HELEN SHIBRU

**Art Unit**

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 March 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4, 6, 15-22, 24-26, 28-30, 32-34 and 36-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6, 15-22, 24-26, 28-30, 32-34 and 36-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 04/06/09 AND 03/05/09
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Amendment***

1. The amendments filed on 03/02/2009 have been entered and made of record. Claims 1-4, 6, 15-26, 28-30, 32-34, and 36-38 are pending.

***Response to Arguments***

2. Applicant's arguments with respect to claims 1-4, 6, 15-26, 28-30, 32-34, and 36-38 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-4, 6, 15-22, 24-26, 28-30, 32-34, and 36-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sawabe (US PG PUB 2005/0232111) in view of Yamane (US Pat. No. 6,181,872).

Regarding claim 1, Sawabe discloses a recording medium having a data structure for managing reproduction of at least video data representing multiple reproduction paths, comprising:

a data area storing at least video data as a transport stream in more than one file (see figures 10, 11, 14, and paragraphs 0084, 0297 and 0305 where the prior art teaches video and audio streams are recorded on to DVD), each file associated with a different one of the multiple reproduction paths (see figures 10 and 11 where it shows files associated with multi-channels), a

navigation area storing at least one navigation list (see figure 7, PGCI which is recorded on the DVD), the at least one navigation list including at least a first navigation data item and a second navigation data item (figure 7 where it shows PGCI including video program #1, video program #2, video program #3), the at least one navigation list controlling a reproduction order of the one or more navigation data items (see paragraph 0097, the information indicating reproduction order is included in the PGCI), the first navigation data item referencing more than one map (see figure 7 where the prior art shows video program #2 referencing to video cell #2, video cell #3, and video cell #4), each map for managing one of the multiple reproduction paths (see figure 7 where it shows the map is associated for one of the files), the second data item referencing a single map for managing a single reproduction path (see video program #1 referencing to video cell #1 in figure 7).

claim 1 differs from Sawabe in that the claim further requires files being interleaved with one another; each map providing position data for the video data of file associated with the reproduction path managed by the map, a flag being stored in the first navigation data item, the value of the flag indicating that the first navigation data item references more than one map, a flag being stored in the second navigation data item, and a value of the flag indicating that the second navigation data item references a single map, and the first navigation data item including an indicator having a value of the number of reproduction paths associated with the first navigation data item.

In the same field of endeavor Yamane files associated with multiple reproduction paths interleaved with one another (see figures 15, 38, 40 and 45 where the prior art shows interleaved multi-angle connection); each map providing position data for the video data of file associated

with the reproduction path managed by the map (see C\_PBI #1 in figure where the C-PBI includes C\_FVOBU\_SA and C\_LVOBU\_SA wherein these items includes information start and end address of the video data), wherein a flag is stored in the first navigation data item (see figure 51A where it shows VOB\_FM =1), the value of the flag indicating that the first navigation data item is references more than one map (for multiple reproduction path, the value of the flag is 1 as shown in figure 51A), and a flag being stored in the second navigation data item (see figure 51A where it shows VOB\_FM =0), the value of the flag indicating that the corresponding second navigation data item is references a single map (for one reproduction path, the value of the flag is 0 as shown in figure 51A step 1400 and the multi-angle flag VOB\_FM identifies whether the VOB set is a multi-angle set or non-multi angle set). See also figure 27 where the VOB set comprises multi angle flag (VOB\_FM) and multi scene flag (VOB\_FP). Flags that shows in figure 27, SPF, IAF, STCDF, and SCAF, are stored in CPBI#j as shown in figure 16. CPBI#j contains the VOB control information. See col. 63 lines 29-67 and col. 70-col. 73), and the first navigation data item including an indicator having a value of the number of reproduction paths associated with the first navigation data item (see figure 52 and col. 65 lines 26-29 where the prior art teaches GOPST values are set for M and N, see col. 55 lines 21-45 where the prior art teaches M is the number of angles, see also col. 58 lines 21-57 where the prior art teaches for fields in which an angle of the corresponding number does not exist, a value for example =0, indicating that the angle does not exist is recorded, the prior art also teaches angle numbers being recorded). In addition Yamane discloses PGCIT referencing to PGCI#1-#3 as shown in figure 16 (referring to navigation list), cell number, C\_PBI#1 to CPBI#j (referring to navigation data items), PGCI referencing to C-PBG#1 (referring to first navigation data item),

CPBI#2 (referring to second navigation data item). Therefore in light of the teaching in Yamane it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sawabe by providing a flag that identifies a single or multiple angle and the number of channels in order to control a plurality of shared data.

Regarding claim 2, Yamane discloses wherein each file is divided into data blocks, and the files are interleaved with one another on a data block by data block basis (see figures 38 and 40-41).

Regarding claim 3, Yamane discloses wherein each data block represents at least an intra-coded picture of video data (see figure 54 GOP and col. 22 line 66-col. 23 line 5).

Regarding claim 4, Yamane discloses wherein each data block represents at least one group of transport packets of at least video data, each transport packet including a packet identifier (PID) (see col. 24 lines 51-67).

Regarding claim 6, Sawabe discloses the first and the second navigation data items provide navigation information for reproducing at least one of the files (see figures 10-11, and claim 1 rejection above).

Regarding claims 15, Yamane discloses each reproduction path represents one of a digital channel and a sub-channel of an RF channel (see col. 7 lines 54-67 and col. 41 lines 8-28, see also Sawabe paragraph 0359).

Regarding claim 16, limitation of claim 16 can be found in claim 1 above. Therefore claim 16 is analyzed and rejected for the same reason as discussed in claim 1 above.

Regarding claim 17, the limitation of claim 17 can be found in claim 1 above. Therefore claim 17 is analyzed and rejected for the same reasons as discussed in claim 1 above. See also claim 12 of Yamane and claim 26 of Sawabe.

Regarding claim 18, the limitation of claim 18 can be found in claim 1 above. Therefore claim 18 is analyzed and rejected for the same reasons as discussed in claim 1 above. See also claims 20 and 32 of Sawabe, claim 4 in Yamane. See also figures 14 and 15 in Sawabe and figure 25 in Yamane.

Claim 19 is rejected for the same reason as discussed in claims 17-18 above.

Claim 20 is rejected for the same reason as discussed in claim 1 above.

Claims 21-22 are rejected for the same reason as discussed in claims 2 and 3 respectively above.

Claims 24-25 are rejected for the same reason as discussed in claims 15 and 2 respectively above.

Claim 26 is rejected for the same reason as discussed in claim 4 above.

Claims 28, 32 and 36 are rejected for the same reason as discussed in claim 15 above.

Claims 29-30 are rejected for the same reason as discussed in claims 2 and 4 respectively above.

Claims 33-34 are rejected for the same reason as discussed in claims 2 and 4 respectively above.

Regarding claims 37-42, Yamane discloses the indicator of the first navigation data item has a value of the number of maps referenced by the first navigation data item (see figure 52 and col. 65 lines 26-29 where the prior art teaches GOPST values are set for M and N, see col. 55

lines 21-45 where the prior art teaches M is the number of angles, see also col. 58 lines 21-57 where the prior art teaches for fields in which an angle of the corresponding number does not exist, a value for example =0, indicating that the angle does not exist is recorded).

***Conclusion***

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HELEN SHIBRU whose telephone number is (571)272-7329. The examiner can normally be reached on M-F, 8:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, THAI Q. TRAN can be reached on (571) 272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/HELEN SHIBRU/  
Examiner, Art Unit 2621  
May 24, 2009

/Thai Tran/

Supervisory Patent Examiner, Art Unit 2621